

REMARKS

Claims 1 and 4-12 are pending in the above-identified application. Claims 1 and 4-12 were rejected. With this Amendment, claim 1 was amended and claims 14-20 were added. Accordingly, claims 1, 4-12 and 14-20 are at issue in the above-identified application.

35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 1 and 11-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over a conventional art (Figs. 1A-C) admitted by applicants in view of *Tokuo* (JP2000075295). Claims 4-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over a conventional art (Figs. 1A-C) admitted by applicants in view of *Tokuo* as applied to claims 1 and 11-12 above and in further view of *Kojima et al.* (U.S. Patent No. 5,650,867). Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamada et al.* (U.S. Patent No. 6,437,845) in view of *Tokuo* as applied to claims 1 and 11-12 above and further in view of *Kume et al.* (U.S. Patent No. 6,330,049). Claims 7-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over a conventional art (Figs. 1A-C) admitted by applicants in view of *Tokuo* as applied to claims 1 and 11-12 above and further in view of *Yamada et al.* Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamada et al.* in view of *Tokuo* as applied to claims 1 and 11-12 above and further in view of *Yamamoto* (EP 0 886170). Applicants respectfully traverse these rejections. Withdrawal of these rejections are respectfully requested.

Claim 1 recites a liquid display device comprising a first substrate, a second substrate arranged facing the first substrate with a pre-set gap in-between the first and second substrates, liquid crystals held in said gap, means for applying an electrical field, a wall structure, and a groove structure, wherein said groove structure extends along diagonal lines of said rectangular area encircled by said wall structure, wherein the liquid crystals in each

small-sized area are divided into four groups, wherein each group is bound by a respective portion of the wall structure, wherein substantially all of the liquid crystals in given group are oriented in a direction perpendicular to the respective portion of the wall structure for that group and are oriented symmetrically with respect to an axis perpendicular to a point of intersection of said two diagonals lines. None of the above-cited references, either alone or in combination, teach a liquid crystal display device having a groove structure wherein the groove structure extends along diagonal lines of a rectangular area encircled by a wall structure, wherein the liquid crystals in each small-sized area are divided into four groups, wherein each group is bound by a respective portion of the wall structure, wherein substantially all of the liquid crystals in a given group are oriented in *a direction perpendicular to* the respective portion of the wall structure for that group and are oriented symmetrically with respect to an axis perpendicular to a point of intersection of said two diagonals lines. For example, Fig. 1 (see of Applicant's claimed invention) shows a rectangular area 15 having liquid crystal molecules 16m orientated within that rectangular area. However, substantially all of the liquid crystal molecules are not only orientated in a direction perpendicular to the respective portion of a wall structure. As shown, many of the liquid crystal molecules are in directions which are not perpendicular to their respective wall structure. Additionally, none of the above-cited references teach liquid crystal molecules which are orientated symmetrically with respect to an axis perpendicular to a point of intersection of two diagonal lines.

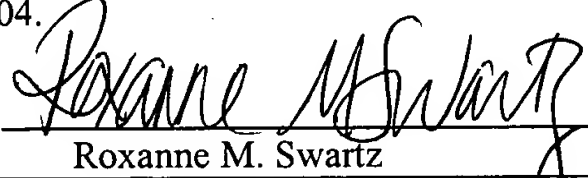
In view of the foregoing, Applicants submit that the application is in condition for allowance. Notice to that effect is requested.

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Respectfully submitted,



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<p>SONNENSCHN NATH & ROSENTHAL LLP P.O. Box 061080 Wacker Drive Station, Sears Tower Chicago, IL 60606-1080</p> <p>Attorney Customer Number: 026263 Phn: (312) 876-8000 Fax: (312) 876-7934</p>	<p><u>CERTIFICATE OF MAILING</u></p> <p>I hereby certify that this correspondence is being deposited as First Class Mail with the United States Postal Service with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December 17, 2004.</p>  <p>Roxanne M. Swartz</p>
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